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10/580,952	05/30/2006	Masataka Togashi	288949US2PCT	8918
22850 7590 12/23/2010 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER BRANSKE, HILARY	
			ART UNIT 2437	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/580,952	<b>Applicant(s)</b> TOGASHI ET AL.	
	<b>Examiner</b> Hilary Branske	<b>Art Unit</b> 2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9,16,17,21, 22,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) 10-15,18-20,23 and 24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9,16,17,21,22,25 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/11/2010</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to Applicant's response filed on 11 October 2010.
2. Claims 1-9, 16, 17, 21, 22, 25, and 26 are currently pending. New claims 25 and 26 have been added.

### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on 11 October 2010 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Response to Arguments***

4. Applicant's arguments, see page 13, lines 14-19, filed 11 October 2010, with respect to the rejection(s) of claim(s) 1-3, 7, 8, 16, and 22 under 35 U.S.C. 103(a) as being unpatentable over Malone et al. (U.S. Patent Application Publication No. US 2004/0125208 A1), in view of Kobayashi (U.S. Patent No. 7,093,131 B1), in view of Takada et al. (U.S. Patent Application Publication No. US 2004/0044911 A1), regarding certification request, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the clarification of the certification request.

### ***Claim Rejections - 35 USC § 103***

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**6. Claims 1-3, 7, 8, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malone et al. (U.S. Patent Application Publication No. US 2004/0125208 A1), hereinafter "Malone", in view of Kobayashi (U.S. Patent No. 7,093,131 B1), hereinafter "Kobayashi", in view of Hilby et al. (U.S. Patent Application Publication No. US 2004/0010472 A1), hereinafter "Hilby".**

7. **Regarding claim 1**, Malone discloses "certification system," i.e., certification (page 2, section 0023); "comprising: information processing equipment that processes information," i.e., capture device (pages 1-2, section 0018); "a certificate issuing server, that issues an electronic certificate to certify the information processing equipment," i.e., the certificate authority issues a Certificate of Authenticity (page 2, section 0023); "and an information storage server that stores information in a storage memory section," i.e., the secure storage facility (pages 2-3, section 0024); "wherein the information processing equipment transmits a certification request to the certificate issuing server," i.e., requesting the certificate (page 4, section 0031); "the certificate issuing server issues the electronic certificate," i.e., the certificate authority generates the certificate (page 4, section 0031); "the information processing equipment receives the electronic certificate issued by the certificate issuing server," i.e., the certificate of authority is sent

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back to the antenna associated with the capture device (Fig. 1, and page 2, section 0023); "generates certified information based on the electronic certificate and processed information and identification information to identify the certified information," i.e., the capture device stenographically encodes the data with the certificate and identifying information (page 4, sections 0035-0036, and page 5, sections 0042-0043); "and transmits the certified information and the identification information to the information storage server," i.e., the file is sent to the storage facility (page 2, section 0023); "and the information storage server receives the certified information and the identification information from the information processing equipment and stores the certified information and the identification information in the storage memory section," i.e., the storage facility receives and stores the file with the identifying information (pages 2-3, sections 0024-0025, and page 5, sections 0043-0049); "and also receives the identification information, retrieves the certified information stored in the storage memory section, and outputs the certified information retrieved," i.e., the storage facility receives a request for an image and can send the requested image to a remote site (page 3, section 0025).

Malone does not disclose the certificate authority certifying the operating environment of the information processing equipment. Kobayashi, however, discloses "certification system," i.e., information authenticating system (col. 14, lines 7-11); "comprising: information processing equipment that processes information," i.e., information authentication apparatus (col. 14, lines 11-35); "a certificate issuing server, separate from the information processing equipment, that issues an electronic certificate

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to certify an operating environment of the information processing equipment," i.e., the information processing apparatus is connected to the authentication station over a network when authenticating data (Fig. 1, col. 14, lines 11-14 and lines 54-58); the information to be authenticated includes time, position, and surrounding environmental condition (col. 14, lines 59-67 and col. 15, lines 1-21) and the authenticating station determines whether time and position information are within a prescribed range before affixing a digital signature (col. 20, lines 28-67 and col. 21, lines 1-44); "wherein the information processing equipment transmits a certification request of the operating environment of the information processing equipment to the certificate issuing server," i.e., sending digital data from the information processing device (col. 18, lines 24-32); "the certificate issuing server calculates a location associated with the operating environment of the information processing equipment," i.e., measures the position of the information authenticating apparatus (col. 17, lines 52-62); "and issues the electronic certificate to certify the calculated location associated with the operating environment of the information processing equipment in response to the certification request of the operating environment transmitted from the information processing equipment," i.e., digitally signing the digital data and encrypting with a secret key of the authenticating station (col. 19, lines 16-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Malone's forensic communications system that utilizes a local location certification system and a remote certificate authority with Kobayashi's technique of authenticating digital data received from an authentication

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apparatus in order to improve the probative value of data as evidence by ensuring the authenticity of the data (Kobayashi - col. 2, lines 30-33).

Neither Malone nor Kobayashi disclose calculating the location based on information included in the certification request. Hilby, however, discloses "calculates a location associated with the operating environment of the information processing equipment based on information included in the certification request," i.e., host server queries third party database using information retrieved from the user to compare stored address information with the user-provided address information and generates a certificate for the user if the information is verified (page 4, ¶ 0046, page 5, ¶ 0054-0055).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Malone's forensic communications system that utilizes a local location certification system and a remote certificate authority and Kobayashi's technique of authenticating digital data received from an authentication apparatus with Hilby's technique of verifying location information provided by a user in order to improve verification of the identity and location of an individual (Hilby - page 1, ¶ 0016).

8. **Regarding claim 2, in view of claim 1**, Kobayashi discloses "wherein the certificate issuing server certifies time when the information processing equipment operates as the operating environment," i.e. time (col. 18, lines 33-41).

9. **Regarding claim 3, in view of claim 1**, Kobayashi discloses “wherein the certificate issuing server certifies location where the information processing equipment operates as the operating environment,” i.e., position (col. 18, lines 42-51).

10. **Regarding claim 7, in view of claim 1**, Malone discloses “wherein the information processing equipment generates composite information that is made up of the electronic certificate and the processed information,” i.e., the certificate is stenographically encoded onto the image and/or audio files (page 4, section 0036); “and transmits the composite information to the information storage server as the certified information,” i.e., sends the file to the storage facility (page 2, section 0023); “and wherein the information storage server receives the composite information and the identification information from the information processing equipment and stores the composite information and the identification information in the storage memory section,” i.e., the secure storage facility receives and stores the file and identifying information (pages 2-3, sections 0024-0025, and page 5, section 0043); “and also receives a query including the identification information, retrieves the composite information stored in the storage memory section, and outputs the composite information retrieved,” i.e., the storage facility receives a request for an image and can send the requested image to a remote site (page 3, section 0025).

11. **Regarding claim 8, in view of claim 1**, Malone discloses “wherein the information processing equipment generates composite information that is made up of the electronic certificate and the processed information,” i.e., the certificate is stenographically encoded onto the image and/or audio files (page 4, section 0036)



“calculates a hash value of the composite information,” i.e., a hash of the file is calculated (page 5, section 0042); “and transmits the hash value to the information storage server as the certified information,” i.e., the hash value is included with the file (page 5, section 0054); “and wherein the information storage server receives the hash value and the identification information from the information processing equipment and stores the hash value and the identification information in the storage memory section,” i.e., the storage facility stores the information (pages 2-3, sections 0024-0025) including the hash value and identification (page 5, section 0054); “also receives the composite information, compares the composite information using the hash value, and stores in the storage memory section the composite information compared,” i.e., the encrypted file (page 4, sections 0035-0038) is received by the storage facility and the file is passed through a message digest algorithm to produce a computed hash which is compared to the received hash, and stores the encrypted photograph that has been compared (page 5, sections 0051-0059); “and also receives a query including the identification information, retrieves the composite information stored in the storage memory section, and outputs the composite information retrieved,” i.e., the storage facility receives a request for an image and can send the requested image to a remote site (page 3, section 0025).

12. **Regarding claim 16, in view of claim 1,** Malone discloses “wherein the information processing equipment transmits to the information storage server authentication information to access the information storage server together with the certified information and the identification information,” i.e., the storage facility receives

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from the capture device the file that has been encrypted with the facility's public key (page 2, section 0023, and page 5, sections 0043 and 0051); "and wherein the information storage server receives the certified information, the identification information, and the authentication information from the information processing equipment," i.e., the storage facility receives the information (pages 2-3, sections 0024-0025, and page 5, section 0051); "and stores the certified information and the identification information received in the storage memory section if the authentication information is valid," i.e., if a valid storage facility public key has been used to encrypt the file, then the outer wrapper can be removed by the storage facility (page 5, section 0052).

13. **Regarding claim 22**, Malone discloses "a certification system," i.e., certification (page 2, section 0023); "comprising: information processing equipment that processes information," i.e., capture device (pages 1-2, section 0018); "a certificate issuing server that issues an electronic certificate to certify the information processing equipment," i.e., the certificate authority issues a Certificate of Authenticity (page 2, section 0023); "and an information storage server that stores information in a storage memory section," i.e., the secure storage facility (pages 2-3, section 0024); "wherein the information processing equipment transmits a certification request of the information processing equipment to the certificate issuing server," i.e., requesting the certificate (page 4, section 0031); "the certificate issuing server issues the electronic certificate to certify the information processing equipment based on the certification request transmitted from the information processing equipment," i.e., the certificate authority generates the

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certificate (page 4, section 0031); "the information processing equipment receives the electronic certificate issued by the certificate issuing server," i.e., the certificate of authority is sent back to the antenna associated with the capture device (Fig. 1, and page 2, section 0023); "generates certified information based on the electronic certificate and processed information," i.e., the capture device stenographically encodes the data with the certificate (page 4, sections 0035-0036, and page 5, sections 0042-0043); "and transmits the certified information to the information storage server," i.e., the file is sent to the storage facility (page 2, section 0023); "and the information storage server receives the certified information from the information processing equipment and stores the certified information in the storage memory section," i.e., the storage facility receives and stores the file with the identifying information (pages 2-3, sections 0024-0025, and page 5, sections 0043-0049); "and also receives identification information to identify the certified information, retrieves the certified information stored in the storage memory section based on the identification information received, and outputs the certified information retrieved," i.e., the storage facility receives a request for an image and can send the requested image to a remote site (page 3, section 0025).

Malone does not disclose the certificate authority certifying the operating environment of the information processing equipment. Kobayashi, however, discloses "certification system," i.e., information authenticating system (col. 14, lines 7-11); "comprising: information processing equipment that processes information," i.e., information authentication apparatus (col. 14, lines 11-35); "a certificate issuing server, separate from the information processing equipment, that issues an electronic certificate

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to certify an operating environment of the information processing equipment," i.e., the information processing apparatus is connected to the authentication station over a network when authenticating data (Fig. 1, col. 14, lines 11-14 and lines 54-58); the information to be authenticated includes time, position, and surrounding environmental condition (col. 14, lines 59-67 and col. 15, lines 1-21) and the authenticating station determines whether time and position information are within a prescribed range before affixing a digital signature (col. 20, lines 28-67 and col. 21, lines 1-44); "the information processing equipment transmits a certification request of the operating environment of the information processing equipment to the certificate issuing server," i.e., sending digital data from the information processing device (col. 18, lines 24-32); "the certificate issuing server calculates a location associated with the operating environment of the information processing equipment," i.e., measures the position of the information authenticating apparatus (col. 17, lines 52-62); "and issues the electronic certificate to certify the calculated location associated with the operating environment of the information processing equipment in response to the certification request of the operating environment transmitted from the information processing equipment," i.e., digitally signing the digital data and encrypting with a secret key of the authenticating station (col. 19, lines 16-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Malone's forensic communications system that utilizes a local location certification system and a remote certificate authority with Kobayashi's technique of authenticating digital data received from an authentication

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apparatus in order to improve the probative value of data as evidence by ensuring the authenticity of the data (Kobayashi - col. 2, lines 30-33).

Neither Malone nor Kobayashi disclose calculating the location based on information included in the certification request. Hilby, however, discloses "calculates a location associated with the operating environment of the information processing equipment based on information included in the certification request," i.e., host server queries third party database using information retrieved from the user to compare stored address information with the user-provided address information and generates a certificate for the user if the information is verified (page 4, ¶ 0046, page 5, ¶ 0054-0055).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Malone's forensic communications system that utilizes a local location certification system and a remote certificate authority and Kobayashi's technique of authenticating digital data received from an authentication apparatus with Hilby's technique of verifying location information provided by a user in order to improve verification of the identity and location of an individual (Hilby - page 1, ¶ 0016).

**14. Claims 4-6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malone, in view of Kobayashi, in view of Hilby, and further in view of Dube (U.S. Patent Application Publication No. US 2002/0199103 A1),**

**hereinafter “Dube”.**

15. **Regarding claim 4, in view of claim 1**, Malone discloses “wherein the information processing equipment acquires time information indicating a current time, and transmits the time information acquired to the certificate issuing server,” i.e., the time is acquired from the GPS information and is included in the file sent to the certification authority (page 2, sections 0021-0023); “wherein the certificate issuing server receives the information from the information processing equipment,” i.e., the certificate authority receives a hash of the document (page 4, section 0031).

Malone nor Kobayashi nor Hilby disclose certifying the specific time associated with the information by attaching unique data. Dube, however, discloses “receives the time information from the information processing equipment,” i.e., receives timing signals that include time information (page 5, sections 0047-0048); “attaches unique data available at no other time than a specific time indicated by the time information to the time information,” i.e., a random number is calculated based on the fluctuations of received timing signals that is unique to the precise time and location of the receiver (page 5, sections 0049-0051) and stored (page 7, section 0068); “and thereby issues the electronic certificate to certify the specific time,” i.e., the certificate is issued and includes the entropy data unique to the specific time (page 7, section 0068, and page 8, sections 0076-0077).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Malone’s forensic communications system

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that utilizes a local location certification system and a remote certificate authority and Kobayashi's technique of authenticating digital data received from an authentication apparatus and Hilby's technique of verifying location information with Dube's technique of generating entropy data based on GPS timing signals received at a specific time in order to reduce the amount of certification processing performed by a local device and increase the security of the generated certificates.

16. **Regarding claim 5, in view of claim 1**, Malone discloses "wherein the information processing equipment acquires location information indicating a location of the information processing equipment, and transmits the location information acquired to the certificate issuing server," i.e., the position is acquired from the GPS information and is included in the file sent to the certification authority (page 2, sections 0021-0023); "and wherein the certificate issuing server receives the location information from the information processing equipment," i.e., the certificate authority receives a hash of the document (page 4, section 0031).

Malone nor Kobayashi nor Hilby disclose certifying the location associated with the information by attaching unique data. Dube, however, discloses "receives the location information from the information processing equipment," i.e., receives timing signals to pinpoint the current geophysical location (page 5, sections 0047-0048); "attaches unique data available at no other location than a specific location indicated by the location information to the location information," i.e., a random number is calculated based on the fluctuations of received timing signals that is unique to the precise time and location of the receiver (page 5, sections 0049-0051) and stored (page 7, section

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0068); “and thereby issues the electronic certificate to certify the specific location,” i.e., the certificate is issued and includes the entropy data unique to the specific location (page 7, section 0068, and page 8, sections 0076-0077).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Malone’s forensic communications system that utilizes a local location certification system and a remote certificate authority and Kobayashi’s technique of authenticating digital data received from an authentication apparatus and Hilby’s technique of verifying location information with Dube’s technique of generating entropy data based on GPS timing signals received at a specific location in order to reduce the amount of certification processing performed by a local device and increase the security of the generated certificates.

17. **Regarding claim 6, in view of claim 5**, Malone discloses “certificate issuing server,” i.e., certificate authority (Fig. 1, item 135); “issues the electronic certificate,” i.e., generates a certificate of authority (page 2, section 0023).

Malone nor Kobayashi nor Hilby disclose attaching compensation information to the location information. Dube, however, discloses “attaches compensation information to compensate the specific location indicated by the location information to the location information, and thereby issues the electronic certificate,” i.e., a normalized timing signal delay is measured to compensate for atmospheric variances (page 5, sections 0049-0051) and the issued certificate includes the delay number (page 7, section 0068, and page 8, sections 0076-0077).



Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Malone's forensic communications system that utilizes a local location certification system and a remote certificate authority and Kobayashi's technique of authenticating digital data received from an authentication apparatus and Hilby's technique of verifying location information with Dube's technique of generating compensation data based on GPS timing signals in order to reduce the amount of certification processing performed by a local device and increase the security of the generated certificates.

18. **Regarding claim 21, in view of claim 1**, Malone discloses "certificate issuing server," i.e., certificate authority (Fig. 1, item 135); "certification request," i.e., requesting a certificate (page 2, section 0023); "information processing equipment," i.e., capture device (Fig. 1, item 102); "issues the electronic certificate," i.e., generates a certificate of authority (page 2, section 0023).

Malone does not disclose attaching unique information available only at a current time, or a certification request of an operating environment. Kobayashi, however, discloses "time information based on the certification request of the operating environment transmitted," i.e., current time (col. 18, lines 33-41).

Malone nor Kobayashi nor Hilby disclose attaching unique information based on the current time. Dube, however, discloses "attaches unique information available at no other time than a current time to time information based on the certification request of the operating environment," i.e., a random number is calculated based on the fluctuations of received timing signals that is unique to the precise time and location of

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the receiver (page 5, sections 0049-0051) and stored (page 7, section 0068); “and thereby issues the electronic certificate to certify the current time,” i.e., the certificate is issued and includes the entropy data unique to the specific time (page 7, section 0068, and page 8, sections 0076-0077).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Malone’s forensic communications system that utilizes a local location certification system and a remote certificate authority and Kobayashi’s technique of authenticating digital data received from an authentication apparatus and Hilby’s technique of verifying location information with Dube’s technique of generating entropy data based on GPS timing signals received at a specific time in order to reduce the amount of certification processing performed by a local device and increase the security of the generated certificates.

**19. Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malone, in view of Kobayashi, in view of Hilby, and further in view of Decime (U.S. Patent Application Publication No. US 2004/0039929 A1), hereinafter “Decime”.**

**20. Regarding claim 9, in view of claim 1,** Malone discloses a “certificate issuing server,” i.e., certificate authority (Fig. 1, item 135); “information storage unit,” i.e., storage facility (Fig. 1, item 142).

Malone nor Kobayashi nor Hilby disclose the certificate issuing server and information storage server are one unit. Decime, however, discloses "wherein the certificate server and the information storage server are one unit," i.e., the certification and validation authority provides a secure repository for evidence and certifies the evidence (Fig. 1, items 118 and 120, page 2, section 0018, and page 4, sections 0047-0049).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Malone's forensic communications system that utilizes a local location certification system and a remote certificate authority and Kobayashi's technique of authenticating digital data received from an authentication apparatus and Hilby's technique of verifying location information with Decime's technique of storing evidence data in a secure repository at the certification and validation authority in order to reduce the amount of certification processing and certified data storage performed by a local device.

21. **Regarding claim 17, in view of claim 1**, Malone discloses "a unit that verifies the information processing equipment," i.e., the storage facility receives the encrypted file with the identifying information and ensures that tampering does not occur (Fig. 1, item 140, pages 2-3, sections 0024-0025, and page 5, sections 0043-0049); "wherein the information storage server transmits part of the certified information and part of the identification information stored in the storage memory section to the unit," i.e., the large database stores the file with the identifying information (Fig. 1, item 142, pages 2-3, sections 0024-0025, and page 5, sections 0043-0049); "and wherein the unit receives

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the certified information and the identification information transmitted by the information processing equipment and stores the certified information and the identification information in the memory section," i.e., the files are stored in the database (Fig. 1, item 142, pages 2-3, sections 0024-0025); "and also receives a query including the identification information, retrieves the certified information stored in the memory section, and verifies the information processing equipment with reference to the certified information retrieved," i.e., the secure storage facility receives a request for the encrypted image and can send the requested encrypted image to a remote site, where the encrypted file contains a certificate previously obtained from the certificate authority (page 3, section 0025, and page 4, section 0036).

Malone does not disclose a verification unit or verifying an operating environment of the information processing equipment. Kobayashi, however, discloses "verifies the operating environment," i.e., determine whether or not the position specified by the positional information added is within a prescribed range (col. 18, lines 42-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Malone's forensic communications system that utilizes a local location certification system and a remote certificate authority with Kobayashi's technique of authenticating digital data received from an authentication apparatus in order to improve the probative value of data as evidence by ensuring the authenticity of the data (Kobayashi - col. 2, lines 30-33).

Neither Malone nor Kobayashi nor Hilby disclose a verification unit with a verification memory section. Decime, however, discloses "a verification unit equipped

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with a verification memory section," i.e., the certification and validation authority provides a secure repository for evidence and certifies the evidence (Fig. 1, items 118 and 120, page 2, section 0018, and page 4, sections 0047-0049).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Malone's forensic communications system that utilizes a local location certification system and a remote certificate authority and Kobayashi's technique of authenticating digital data received from an authentication apparatus and Hilby's technique of verifying location information with Decime's technique of storing evidence data in a secure repository at the certification and validation authority in order to reduce the amount of certification processing and certified data storage performed by a local device.

**22. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malone, in view of Kobayashi, in view of Hilby, and further in view of Walker et al. (U.S. Patent Application Publication No. US 2002/0120850 A1), hereinafter "Walker".**

**23. Regarding claim 25, in view of claim 1,** neither Malone nor Kobayashi nor Hilby explicitly disclose encrypting time and location information included in the certification request. Walker, however, discloses "wherein information processing equipment encrypts time information and encrypts location information regarding the operating environment of the information processing equipment, the encrypted time

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information and the encrypted location information being included in the certification request," i.e., caller incorporates time and geographical location signals into a timestamp in cryptographic form for certification (page 6, ¶ 0055); central controller decrypts and verifies timestamp (page 5, ¶ 0045-0046); "and the information processing equipment transmits, automatically and periodically, the certification request to the certificate issuing server," i.e., timestamping could be performed according to a predetermined schedule, having either regular or irregular intervals (page 4, ¶ 0035, page 8, ¶ 0073-0074).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Malone's forensic communications system that utilizes a local location certification system and a remote certificate authority and Kobayashi's technique of authenticating digital data received from an authentication apparatus and Hilby's technique of verifying location information with Walker's technique of certifying encrypted time and location signals in order to improve integrity of the data (Walker - page 2, ¶ 0019).

24. **Regarding claim 26, in view of claim 22**, neither Malone nor Kobayashi nor Hilby explicitly disclose encrypting time and location information included in the certification request. Walker, however, discloses "wherein information processing equipment encrypts time information and encrypts location information regarding the operating environment of the information processing equipment, the encrypted time information and the encrypted location information being included in the certification request," i.e., caller incorporates time and geographical location signals into a

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timestamp in cryptographic form for certification (page 6, ¶ 0055); central controller decrypts and verifies timestamp (page 5, ¶ 0045-0046); "and the information processing equipment transmits, automatically and periodically, the certification request to the certificate issuing server," i.e., timestamping could be performed according to a predetermined schedule, having either regular or irregular intervals (page 4, ¶ 0035, page 8, ¶ 0073-0074).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Malone's forensic communications system that utilizes a local location certification system and a remote certificate authority and Kobayashi's technique of authenticating digital data received from an authentication apparatus and Hilby's technique of verifying location information with Walker's technique of certifying encrypted time and location signals in order to improve integrity of the data (Walker - page 2, ¶ 0019).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Benson et al. (U.S. Patent Application Publication No. US 2006/0291657 A1) disclose monitoring remotely located mobile objects.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hilary Branske whose telephone number is (571) 270-3395. The examiner can normally be reached on 8:00 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/H. B./  
Examiner, Art Unit 2437

/Emmanuel L. Moise/  
Supervisory Patent Examiner, Art Unit 2437